

## 5" JET FUEL LINE FABRICATION AND INSTALLATION - AHTS VESSEL -



SHIP:  
ITC CYCLONE - ANCHOR HANDLING TUG SUPPLY VESSEL, DP2, FIFI 1

SHIPOWNER:  
INTERNATIONAL TRANSPORT CONTRACTORS MANAGEMENT

MAIN DIMENSIONS:  
LENGTH, OVER ALL 70.70 M  
LENGTH, BTW. PERP. 65.47 M  
BREADTH, MLD. 16.00 M  
DEPTH, MOULDED 7.20 M  
SCANTLING DRAUGHT 6.20 M

### STEP 1 - Situation

Step was requested to supply a turn-key solution for a new 5" schedule 80 pipe line to allow the ship to transport and supply jet fuel for helicopters in oil rigs.

Our solution included:

- Site survey while sailing in Angola.
- Material supply and fabrication in our workshop in Lisbon, Portugal
- Transport of all materials, pipe, fittings and valves to Walvis Bay, Namibia.
- Flying squad of pipe fitters and coded welders traveled to Walvis Bay for final installation on key side.
- Logistic and installation executed in cooperation with STEP Namibia.

### STEP 2 – Challenges

- Reduced time frame.
- Level of Quality.
- Multicultural environment.
- Risk management.
- Mitigation of variations of the initial baseline.
- Correct initial site survey to optimize fabrication and reduce discrepancies during installation.



### STEP 3 – Action

- Site survey for measurements and collision analysis.
- Isometric drawings and BOM list.
- Fabrication of 52 x spools of 5" A106 sch80 pipe in Lisbon workshop.
- Quality control including welding procedures certified material traceability and pressure test.
- Packing of all material inside a 20' container.
- Control of all logistic operations in Namibia.
- Removal of existing mud and diesel galvanized pipe lines.
- Installation of the new pipe line.



### STEP 4 – Result

- Fabrication and pressure test in 6 days
- Installation completed in 12 days with 6 pipe fitters and 4 welders including night shift.
- More than 100 meters of a 5" sch80 pipe line commissioned and ready for immediate operation.

